Chapter 5
Regional Organisations
5. REGIONAL ORGANISATIONS

There are six professional laboratory medicine organisations, which are IFCC regional partners:

- African Federation of Clinical Chemistry (AFCC)
- Arab Federation of Clinical Biology (AFCB)
- Asia-Pacific Federation for Clinical Biochemistry and Laboratory Medicine (APFCB)
- European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)
- Latin-American Confederation of Clinical Biochemistry (COLABIOCLI)
- North American Federation of Clinical Chemistry and Laboratory Medicine (NAFCC)

5.1. Asia-Pacific Federation for Clinical Biochemistry and Laboratory Medicine (APFCB)

The Asia Pacific Federation for Clinical Biochemistry and Laboratory Medicine (APFCB) had its humble beginnings in the late 1970s. Today in 2021, after more than forty years of growth and development, the APFCB is the largest of the six regional federations of clinical chemistry and laboratory medicine. The APFCB is a massive regional federation with 18 full Ordinary Members, 6 Affiliate Members and 22 Corporate Members.

The following Full Members:
- Australasian Association for Clinical Biochemistry and Laboratory Medicine (AACB)
- Chinese Society of Laboratory Medicine (CSLM)
- Hong Kong Society of Clinical Chemistry (HKSCC)
- Association of Clinical Biochemists of India (ACBI)
- Indonesian Association for Clinical Chemistry (IACC)
- Iranian Association of Clinical Laboratory Doctors (IACLD)
- Japan Society of Clinical Chemistry (JSCC)
- Korean Society of Clinical Chemistry (KSCC)
- Malaysian Association of Clinical Biochemists (MACB)
- Mongolian Association of Health Laboratorians (MAHL)
- Nepal Association for Medical Laboratory Sciences (NAMLS)
- Pakistan Society of Clinical Pathologists (PSCP)
- Philippine Association of Medical Technologists (PAMET)
- Singapore Association of Clinical Biochemistry (SACB)
- Association for Clinical Biochemistry, Sri Lanka (ACBSL)
- Chinese Association for Clinical Biochemistry, Taiwan (CACB)
- Thailand Association of Clinical Biochemists (TACB)
- Vietnamese Association of Clinical Biochemistry (VACB)

The following Affiliate Members:
- Association of Medical Biochemists of India (AMBI)
- College of Community Physicians of Sri Lanka (CCPSL)
- Chinese Association of Clinical Laboratory Management (CACLM)
- Macao Laboratory Medicine Association (MLMA)
- Nepalese Association of Clinical Chemistry (NACC)
- Philippine Council for Quality Assurance in Clinical Laboratories (PCQACL)

In addition, the APFCB has close partnership and collaboration with twenty-two in-vitro diagnostic companies, comprising global multinational, regional and local companies. Our corporate partners support the APFCB in many of its activities. The APFCB has a good history of collaboration with other international federations.
We have a long-standing partnership and good support from the IFCC. In addition, the APFCB has on-going memoranda of understanding with the World Association of Societies of Pathology and Laboratory Medicine (WASPaLM) and the American Association for Clinical Chemistry (AACC).

Apart from the size, a feature of the APFCB is the diverse range of laboratory practices, within the federation. This puts us in a unique position for drawing on the expertise of the more developed societies to assist the less developed. Over the years, the APFCB travelling lecturer program has been a key resource for member associations, enabling information and technology transfer within the region. Due to the Covid-19 pandemic, the APFCB travelling lecturer program lectures is delivered virtually since 2020.

The pandemic has also disrupted some of the planned activities of the APFCB. The 16th APFCB Congress in 2022 which is planned to be held in Sydney, Australia has been postponed. In its place, the APFCB will have a joint event with the IFCC WorldLab in Seoul, Korea in 2022. The 16th APFCB Congress in Sydney, Australia will be held in 2024 and the 17th APFCB Congress in Kuala Lumpur will move to 2026.

Early this year, the education and laboratory management committee has made available a two-day virtual workshop on Laboratory Testing of COVID-19 to help lab professionals with appropriate guide in COVID-19 testing. Details of our ongoing scientific and educational activities are on the APFCB website and our communications committee will feature a rich array of articles, reports and interesting information.

I strongly encourage you to visit all the sections of our website at www.apfcb.org

APFCB activities are also available on social media as follows:
- Facebook Page: https://www.facebook.com/APFCB/
- Twitter: https://twitter.com/APFCB_LM
- Instagram: https://www.instagram.com/apfcb_lm
- LinkedIn: https://www.linkedin.com/company/apfcb/
- YouTube: https://www.youtube.com/channel/UCoiicTsnVX-CQjklgZHQ54Q

An ongoing activity which was initiated in 2020 that I would also like to highlight is the Masterclass in Interpretative Commenting on Clinical Chemistry reports. These webinar series discuss and analyse interpretative comments and educate laboratory professionals on the addition of interpretative commenting. The resource material and the recordings of these webinars are available on the APFCB website under the heading of Webinars: https://www.apfcb.org/webinars.html.

In this brief introduction to the APFCB, I would like to end by indicating that the APFCB Executive Board is actively looking for participation from our younger colleagues and laboratory professionals. We do need renewal and succession as we prepare to support our healthcare partners to manage their patients. Do participate in the activities of the APFCB and do step forward to contribute where possible.

To everyone else outside the Asia Pacific, I do welcome you to engage the federation, collaborate with us, participate in our activities, and become part of the family.

**APFCB President**

**Dr. Sunil Sethi**

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5.2. Latin-American Confederation of Clinical Biochemistry (COLABIOCLI)

The Latin American Confederation of Clinical Biochemistry, COLABIOCLI, was founded in 1968 in Mar del Plata, Argentina and all local societies of Latin America for Clinical Chemistry are today its members. In December 1968, in the first Congress of the Confederation, we have the presence of distinguished professionals: Dr. Bernardo Houssay, Argentina (Nobel Prize), Dr. Luis Leloir, Argentina (Nobel Prize), Dr. Martin Rubin and Dr. Cesar Milstein, Argentina (Nobel Prize).

In 1973, The Latin American Confederation of Clinical Chemistry was officially established during the II Congress of Biochemistry in Porto Alegre Brazil. Since 1968, COLABIOCLI has developed multiple activities regarding scientific matters and professional regulations.

The mission of COLABIOCLI is the improvement of the profession through policies aimed at the continuous improvement of the ethical and scientific standards of Clinical Biochemistry. The main objective is to work together with academic units to reach a consensus of the curricular bases for vocational training in the region and also establish a system of continuous quality improvement in all laboratories in Latin America, with the cooperation of PAHO / WHO, IFCC, the National Societies of Clinical Chemistry, ministries of Public Health and University Authorities in Latin America.

Since its formation important results have been achieved with respect to implementation of continuous quality improvement programmes. Due to the dynamics of knowledge impacting on the progress of clinical laboratory science and technology it has become essential to strengthen alliances with the academic units in the region, for the purpose of managing knowledge, and specific policies for continuous training. By the asymmetry between the countries of the Confederation, actions are needed to achieve implementation of registration and licensing of the profession and to support programmes of external and internal quality assessment to ensure the results of the laboratory as a contribution to public health.

The Latin American Congress is organised every two years. These conferences have been held in Argentina, Brazil, Chile, Costa Rica, El Salvador, República Dominicana, Mexico, Panama, Paraguay, Venezuela, Peru, Ecuador, Uruguay and Panama. The average attendance was 1,200 professionals.

One of the main objectives of COLABIOCLI, is give support, to the establishment of programmes of continuous quality improvement in the laboratory. Since 1990 COLABIOCLI, PAHO / WHO with support from other institutions have developed complementary activities:
- Courses and workshops on quality
- Publication of three books on quality assurance
- Visits to various health institutions, to stimulate their interest in our programmes
- Provide control material and of course, to develop them
- Seminar on the Management of External Quality Assessment
- Training courses for tutors on Quality Management System
- Participation in National Congresses and organisation of Latin American Congress
- Financing of visiting lecturer, according to local needs.
- National regulations and registration of laboratories in the following countries: Argentina, Brazil, Bolivia, Paraguay, Peru, Colombia, Chile, Ecuador, El Salvador, Honduras, Guatemala, Venezuela and Uruguay.

On occasion of the Ordinary General Assembly of COLABIOCLI that took place in Panama City on September 12, 2019, during the XXIV Latin American Congress of
Clinical Biochemistry, at the Megapolis Convention Center, the election of the authorities of the Executive Committee for the next biennium, coming from the National Entities members of the countries that make up the COLABIOCLI was made.

The Executive Committee is composed by below mentioned Members:

**AUTHORITIES COLABIOCLI (2020-2022)**
- President: Dr. Álvaro Paul Justiniano Grosz (Bolivia)
- Vice-President: Dr. Luiz Fernando Barcelos (Brazil)
- Secretary: Dr. Rosa Inés Escalier Torrejón (Bolivia)
- Treasurer: Dr. Lisandra Katya Morales Jurado (Bolivia)
- Member: Mgter. Jovanna Borace (Panama)
- Member: Dr. María Elena Arredondo (Chile)
- Member: QF Fernando Antúnez (Uruguay)
- Past President: Dr. QF Stella Raymondo (Uruguay)

COLABIOCLI has developed the following programmes: (1) Quality Management; (2) for standard operating procedures, (3) documents laboratory (4) internal control and external quality assessment, (5) internal and external audits, (6) continuing education and training, (7) biosafety standards, (8) preventive and corrective maintenance of equipment.

COLABIOCLI also managed to achieve goals in the records of national regulation, in: Argentina, Brazil, Colombia, Cuba, Costa Rica, Dominican Republic, Honduras, Guatemala, Peru, Colombia, Venezuela, Paraguay, Uruguay and Ecuador and, recently, Bolivia.

COLABIOCLI also promotes the implementation of external quality assessment and has an ethical commitment to institutions and professionals of health. The countries with External Quality Assessment are: Argentina, Brazil, Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Colombia, Venezuela, Ecuador, Paraguay, Peru, Spain and Uruguay.

Goals achieved:
1. External Quality Assessment in 89% of countries.
2. Preparation of control samples: Argentina, Brazil, Colombia, Guatemala, Mexico, Uruguay.
4. Establishment of a Quality System.
6. In October 2008, the National Clinical Society of Colombia, held the course, auditing for members of all countries of South America.
7. In June 2009, the National Society of Clinical Chemistry Panama, conducted an auditing course for delegates from Mexico, Central America and the Caribbean.
8. Meetings were organised external quality assessment in: San Salvador, Guatemala, Honduras, Nicaragua, Dominican Republic, Bolivia, Peru, Uruguay, Ecuador and Colombia.

Strategies and Objectives:
1. The completion of the registration procedures, in all countries
2. Innovation of the External Quality Programme,
3. Developing professional resources to manufacture reference materials
4. Continuing with the efforts for the establishment of a Quality Control Programme in the Latin American countries.
5. To actively involve of health authorities, continuity of local distance learning programmes, and implementation of national and international guidance for the accreditation programme.

In addition to these programmes, COLABIOCLI, implements and administers a programme of visiting professors. This programme ensures participation of Lecturers in the Congress of the National Institutions that require it, according to your needs. One of the policies of COLABIOCLI also includes visits to Ministers of Health, university authorities and national health programmes to strengthen at laboratory professionals and their activities. Many of the activities described above have been supported by PAHO/WHO, in cooperation with the IFCC.

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### 5.4. European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)

In 2007 The European Federation of Clinical Chemistry and Laboratory Medicine (EFLM formerly EFCC) was formed by the merger of FESCC (Forum of European Societies of Clinical Chemistry) and EC4 (European Communities Confederation of Clinical Chemistry). EFLM connects National Societies of Clinical Chemistry and Laboratory Medicine and creates a platform for all specialists working in the field in Europe. The mission of EFLM is to 1) enhance patient care, 2) improve outcomes by promoting and improving the scientific, professional, and clinical aspects of clinical chemistry and laboratory medicine and 3) to ensure effective representation of laboratory medicine both at European Union level and to other pan-European and subregional bodies. All member societies of IFCC in Europe may become members of EFLM. Non-IFCC societies may obtain provisional membership for three years, provided that they apply for IFCC membership in the meantime. The General Meeting is the governing body of EFLM and is composed of a nominated representative from each EFLM National Society Member. It convenes at least once every two years. The main decisions reserved for the General Meeting are: admission and exclusion of member associations as full, provisional or affiliate members, election of the Executive Board, adoption of accounts and budgets, amendment of EFLM Articles of Association and approval of Executive Board proposed policies. EFLM is legally registered in Belgium. The Operative Office is located in Milan where the office is also maintained in collaboration with IFCC. Current (Full) membership of EFLM comprises the national societies of the following 41 countries: Albania, Austria, Belgium, Bosnia Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kosovo, Latvia, Lithuania, Luxembourg, Macedonia, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, UK, Ukraine. EFLM has also 7 Affiliate Members and 1 Provisional Member. The operational structure of EFLM consists of an Executive Board (EB) and currently...
five Committees (C) which conduct out their tasks via Working Groups (WG), Task and Finish Groups (TFG) and Task Groups (TG) and Task Forces (TF). Officers of the EB (president, past-president, president-elect, secretary, treasurer and two members-at-large) are elected by the General Meeting for 2-year terms. Membership and corresponding membership in WGs is by application and open to nominations by EFLM national societies.

The main activities of EFLM relate to education, research, development of the profession, requirements for competence, quality and accreditation of laboratories, organisation of congresses, and publications. EFLM has five Committees:

- Science (C-S)
- Quality and Regulations (C-QR)
- Profession (C-P)
- Education and Training (C-ET)
- Communication (C-C)

For updates, please visit the EFLM website (www.eflm.eu).

The Science Committee (C-S) focuses on promotion of research that translates the scientific results of laboratory medicine to clinical applications and improves patient outcomes through the appropriate use and interpretation of laboratory data in clinical practice. The Committee currently has WGs on:

- **Autoimmunity Testing (WG-AT)** which harmonises the measurement and use of autoimmunity tests.
- **Biological Variation (WG-BV)** which explores the sources of variation in and develops a critical appraisal checklist for papers on biological variation. This WG has two subgroups:
  - Task Group: Biological Variation Database, responsible of the EFLM Biological Variation database;
  - Task and Finish Group: Practical Approach to Measurement Uncertainty with the aim to determine the major components of measurement uncertainty of common laboratory tests and the procedure of data collection.
- **Cardiac Markers (WG-CM)** which encourages and monitors the implementation and harmonisation of international guidelines on the use of laboratory tests for cardiovascular prevention, prognosis and diagnosis.
- **Harmonisation (WG-H)** aims to act as a collector of the harmonisation initiatives arising from other WGs or Task and Finish Groups of EFLM and from National Member Societies active in the field and will disseminate them to all the EFLM Member Societies attempting to monitor their application and effects.
- **Patient Focused Laboratory Medicine (WG-PFLM)** aims to evaluate and study methods for how specialists in laboratory medicine can communicate directly with the patients and how the laboratory can play an active role in patients using self-monitoring for monitoring their disease.
- **Postanalytical Phase (WG-POST)** which carries out international surveys amongst general practitioners and investigates how doctors use and interpret laboratory tests commonly used for managing patients in primary care.
- **Preanalytical Phase (WG-PRE)** which promotes the perception of the importance of the quality of the preanalytical phase of laboratory medicine by carrying questionnaires for assessing the current practices related to some pre-analytical variables and defining the best practices for some critical activities in the preanalytical phase. This WG has a subgroup:
  - Task and Finish Group: Hemolysis, Icterus and Lipemia (HIL) interference with the aim to collaborate with IVD manufacturers to improve the quality and scope of the data on HIL indices provided to end-users of laboratory reagents and equipment.
• **Test Evaluation (WG-TE)** which sets standards and develops practical tools for designing research studies for the evaluation of the clinical value and impact of new biomarkers. This WG has a subgroup:
  - Task Group: Performance Specifications Based on Outcome Studies with the aim to set analytical performance specifications (APS) for measurands based on outcome studies.
• **Urinalysis (WG-U)** which promotes standardisation and high-quality procedures that can improve clinical utilisation of laboratory tests and the development of new urinalysis technologies.

**The Quality and Regulations Committee (C-QR)** supports the establishment of effective accreditation schemes and quality management systems in all European countries and liaises with ISO, CEN and the European Accreditation body (EA). The Committee currently has one WG on:
• Accreditation and ISO/CEN (WG-A/ISO), which represents EFLM in EA, ISO TC212 and CEN TC140. The WG focuses on influencing ISO/CEN standards and harmonisation of accreditation by international surveys, education and training of assessors related to specific professional standards of ISO 15189 and on setting European procedures for accreditation according to the flexible scope.

**The Education and Training Committee (C-ET)** has general responsibility for the postgraduate training aspects of the work of EFLM, in liaison with the Congress and Conferences Division and the Education and Management Division of IFCC, and with UEMS. The Committee organises regional and sub-regional conferences, workshops and postgraduate continuing education courses in association with relevant national societies. The Committee operates three WGs:
• **Conferences and Postgraduate Education (WG-CPE)**, which is involved in the evaluation of bids for EuroMedLab Congresses, in maintaining the EFLM Speakers Bureau and in developing/ maintain the EFLMLabX project: the EFLM exchange programme. Moreover, the WG is responsible for granting of EFLM auspices.
• **Distance education and e-learning (WG-DE)**, which aims to establish and maintain efficient distance learning channels between EFLM and its member societies in education within the field of clinical chemistry and laboratory medicine.
• **Laboratory Medicine Credit Points (WG-LMCP)**, which aims to establish and run an EFLM project to allocate credit points for educational events held in Europe and address to all Specialists of Laboratory Medicine.

**The Professional Committee (C-P)** addresses the professional interests of specialists in laboratory medicine across Europe and promotes the contributions of specialists in laboratory medicine to better health and best care. Its aim is to achieve recognition of professional qualifications under European Union legislation based on the principles of free movement of professionals within Europe. It liaises with the European Commission on professional matters and takes the lead in developing pan-European professional and ethical standards. The Committee currently has two functional units on:
• **Register (WG-R)**, which manages the Register of European Specialists in Laboratory Medicine (EuSpLM).
• **EFLM Syllabus Course (TG-ESC)**, responsible to deliver and maintain an on-line revision course designed to increase the knowledge and exam confidence for postgraduate students or for any person looking to enhance knowledge on a specific topic.

In 2020, under this Profession Committee, a new initiative has been established: the
**EFLM Academy**: a package of professional benefits for Specialists in Laboratory Medicine supporting their education, training and continuous professional development. The EFLM Academy encompasses the European Register of Specialist in Laboratory Medicine for those who meet the equivalence of standards in education and Training as set by EFLM.

The **Communication Committee (C-C)** is responsible for efficient communication channels between EFLM and its member societies and other professional institutions, individuals and other targeted audience via EFLM’s website (www.eflm.eu) and EFLM Newsletter “EuroLabNews”. The official scientific journal of EFLM is Clinical Chemistry and Laboratory Medicine (CCLM). The Committee carry on its activities via its Working Group on Promotion and Publications (WG-PP). It has also a Task Group dedicated to Young Scientists.

EFLM has also three **Task Forces (TF):**

- **European Regulatory Affairs (TF-ERA)**, with the main aim to guide the transition to the IVDR per May 2022 at a strategic level by creating a governance structure and by being “at the table” and involved for future EC regulations, meetings and consultations.

- **Disruptive Technologies in Laboratory Medicine (TF-DT)**, which aims to develop strategies for the integration of technologies changing Laboratory Medicine into standard diagnostic care within the Federation and between EFLM member societies and other targeted audiences.

- **Laboratory Medicine for Mobile Societies** in cooperation with the Arab Federation of Clinical Biology, with the aim to harmonize laboratory strategies to monitor health and to detect communicable and non-communicable disease in people mobility and migration.

**Awards.**

EFLM has six awards:

- **The EFLM Award for Scientific Achievements in Laboratory Medicine - sponsored by Roche.** This award is to honour an individual, member of an EFLM National Societies, who has made important scientific contributions and innovations within the field of Clinical Chemistry and Laboratory Medicine. The EFLM award is granted for excellent work in basic, translational or clinical research to promote diagnostic medicine. It appreciates significant research contributions that advance the field in biochemical and molecular analytics and methods, digitalisation, new diagnostic strategies, health technology assessment etc. The award is given every two years on occasion of the EuroMedLab congress and is financially supported by Roche with an amount of 5,000 Euros.

- **The EFLM Award for Achievements in Advancing Laboratory Medicine in Europe - sponsored by Roche.** This award has been created to recognise an individual, member of an EFLM National Societies, who has made important contributions to advance the profession of Clinical Chemistry and Laboratory Medicine in Europe and to enhance the visibility of the discipline within diagnostic and therapeutic medicine. Such outstanding work includes e.g. the promotion of interoperable programs between EFLM member societies, professional development, dissemination and teaching, increasing the visibility of Laboratory Medicine or the harmonisation of training curricula of the different professions within Clinical Chemistry and Laboratory Medicine. The award is given every two years on occasion of the EuroMedLab congress and is financially supported by Roche with an amount of 5,000 Euros.

- **The EFLM Award for Excellence in Outcomes Research in Laboratory Medicine -**
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sponsored by Abbott. The Award is given to the best published paper, as judged by an independent panel of experts, which demonstrates improved clinical and/or economic outcomes of an in vitro diagnostic test or better management of laboratory/test data. The award is given every two years on occasion of the EuroMedLab congress and is financially supported by Abbott with an amount of 5,000 Euros.

- **The EFLM Award for Excellence in Performance Specifications Research - sponsored by Abbott.** The Award is given to the best published paper, as judged by an independent panel of experts, which demonstrates an important and novel contribution to the theory or practical application of performance specifications. The award is given every two years on occasion of the EuroMedLab congress and is financially supported by Abbott with an amount of 5,000 Euros.

- **The EFLM Walter Guder Preanalytical Award – sponsored by Becton Dickinson.** The award is addressed to young scientists under 40 years of age, member of an EFLM National Societies, who have made a significant contribution to the advancement of the preanalytical phase. The award is given to the best study accepted for peer reviewed publication, as judged by an independent panel of experts. The award is given every two years on occasion of the EFLM Preanalytical Conference and is financially supported by Becton Dickinson with an amount of 5,000 Euros.

- **The EFLM Cardiac Marker Award for remarkable scientific work in the field of cardiovascular diseases– sponsored by HyTest.** This award has been created to achieve wider recognition of the importance of high-quality research in the field of cardiac markers among laboratory professionals in Europe. The EFLM-HyTest Cardiac Marker Award is granted to a young scientist under 40 years of age, member of an EFLM National Societies, for remarkable scientific work in the field of cardiovascular diseases. The award is given every two years on occasion of the EuroMedLab congress and is financially supported by HyTest with an amount of 5,000 Euros.

A memorandum of understanding between EFLM and IFCC has formalised the relationship between the two Federations. EFLM has its own Corporate membership policy aiming to establish various models of collaboration with corporate partners from the IVD industry by setting up various projects that support the development of the profession in Europe.

Currently EFLM has formalised its collaboration with the following organisations:
- AACC (American Association of Clinical Chemistry), AACB (Australasian Association of Clinical Biochemists), AFCB (Arab Federation of Clinical Biology), BioMedAlliance (Biomedical Alliance in Europe), CEN & CENELEC, CLSI (Clinical and Laboratory Standards Institute), COLABIOCLI (Latin America Confederation of Clinical Biochemistry), EC (European Commission), EA (European co-operation for Accreditation), EAS (European Atherosclerosis Society), EASI (European Autoimmunity Standardization Initiative), EIBIR (European Institute for Biomedical Imaging Research), EMA (European Medicine Agency), EQALM (External Quality Assurance Programmes in Laboratory Medicine), ESR (European Society for Radiology), ISO (International Organization for Standardization), MedTech Europe (European trade association for the medical technology industry), UEMS (European Union of Medical Specialists).

EFLM intends to set up even wider collaboration with sister Federations in order to harmonise scientific, educational and professional efforts in a complementary fashion, so that laboratory and health care professionals enjoy the benefits of such a collaboration both in the Euro-region and worldwide.
5.5. Arab Federation of Clinical Biology (AFCB)

The Arab Federation of Clinical Biology (AFCB) was established in 1974 in Egypt. The AFCB is managed by its Executive Board (EB) that is elected periodically every three years. Each member society in the AFCB is represented by one delegate in the EB. In its first meeting the EB elects its president, Vice-president, Treasurer, General Secretary, and chairs of its needed committees according to its bylaws. The past AFCB president also is a member of the EB. AFCB is a federation of associations, syndicates and bodies representing specialists in the field of laboratory medicine and health, in scientific and educational institutions and in medical laboratories for diagnosis and research in both private and public sectors, within the Arab world.

The twelve countries that currently form the AFCB are:
Algeria, Egypt, Jordan, Lebanon, Libya, Morocco, Palestine, Saudi Arabia, Sudan, Syria, Tunisia, and Yemen.

Among the aims of the Federation are to: tighten relationships between all those who work in the field of Clinical Laboratory all over the Arab world including:
1. sharing information, expertise, and scientific achievements.
2. organising seminars and training in clinical biology and laboratory medicine.
3. publishing scientific journals and periodicals specializing in clinical and laboratory medicine.
4. organising training and educational sessions.
5. participating in the creation of national bodies and associations within the Arab countries that do not have such organisations in respect to their local legislation.
6. giving support and advice to national bodies and associations within the Arab countries.
7. providing consultation and expertise as requested by scientific and production institutions in the Arab world
8. organise scientific congresses, participate at both regional and national congresses in the Arab world, provide the organising countries with all the scientific support needed;
9. co-ordinate with the Council of Arab Ministers of Health on clinical laboratory scientific matters.
10. implement International Units;
11. provide support to IVD industry in the Arab world.
12. support Quality Management Programmes in Health Laboratories.


Our Vision
To work on the development of the profession and the science of laboratory medicine in the Arabic world.
Our Mission:
1. To be the legitimate voice for the profession of laboratory medicine in the Arabic world.
2. To be lead in the Arab and international community with regard to the profession of laboratory medicine
3. To serve members with the maximum potential.
4. To maintain high professional standards in the practice of medical laboratory sciences in the Arabic world.

Our Objectives:
1. Strengthening the link between workers in the field of clinical laboratory science in the Arab world, and exchange of experiences and scientific information.
2. Organisation of periodic scientific conferences in the field of clinical laboratory science and scientific symposia, seminars, exchange briefing visits, and contribute to the Arab national conferences, and provide adequate scientific support.
3. Issuing scientific documents and specialised publications.
4. Contribute in the formation of national bodies and associations in the Arab countries that do not have such bodies, where such formations, according to the laws and regulations in force in those countries, and support them.
5. Provide advice and expertise to the Arab production companies in the field of clinical laboratory reagents and equipment.
6. Support the programs of quality assurance in laboratory in the Arab world and exchange of information and provision of scientific advice and study the possibility of the use of international units.
7. Coordination with the Council of Arab Ministers of Health in matters of clinical laboratory science.
8. Work on the harmonisation of legislation and laws governing the work of the laboratory in different countries and make an agreement on a common definition of certificates of competence and work with the Arab Health Ministers for approval.
9. Cooperation and coordination with the World Health Organization in the curricula of rehabilitation, training, and quality assurance programs.
10. Proof of the presence in international and regional organisations concerned with the clinical laboratory sciences.

Membership:
Arab Federation of Clinical Biology accepts membership of organisations, associations, trade unions and professional associations that accept the AFCB Statute, and works to achieve its objectives and submit a request for enrolment that is not inconsistent with its basic system of the AFCB.

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5.6. African Federation of Clinical Chemistry (AFCC)

The African Federation of Clinical Chemistry (www.afccafrica.org) is an organisation of Clinical Chemistry Societies in the African continent, and a regional society of the International Federation of Clinical Chemistry (IFCC). At present, the membership comprises of the following fifteen countries:

- Egypt - Egyptian Society of Clinical Chemistry and Clinical Laboratory Sciences (ESCC)
- Egypt - The Egyptian Association of Health Care Quality and Patient Safety
- Ethiopia - Ethiopian Medical Laboratory Association (EMLA)
- Kenya - Kenyan Association of Clinical Chemistry
- Malawi - Malawi Association of Medical Laboratory Scientists (MAMLS)
- Morocco - Société Marocaine de Chimie Clinique (SMCC)
- Nigeria - Association of Clinical Chemists of Nigeria (ACCN)
- Rwanda - Rwanda Society of Pathologists
- South Africa - South African Association of Clinical Biochemistry (SAACB)
- Sudan - Sudanese Association of Clinical Biology
- Tunisia – Société Tunisienne de Biologie Clinique (STBC)
- Zambia - Biomedical Society of Zambia (BSZ)
- Zimbabwe - Zimbabwe Association of Clinical Biochemists (ZACB)

Eleven of these countries are Full Member Societies of the IFCC.

The inaugural congress of the AFCC took place in October 2009 in Ibadan, Nigeria and the second congress was in Nairobi, Kenya 2011. The third congress was held in Cape Town, South Africa in 2013. The fourth congress took place in Harare, Zimbabwe 28-30 April 2015. The fifth congress coincided with the IFCC WordLab congress in Durban, South Africa in October 22 to 25 2017. The sixth congress was held in Marrakech, Morocco from 23rd to 27th September 2019. The current Board members serving for the term 2018 - 2020 are: President: Prof RT Erasmus (South Africa), Immediate Past-President: Prof AB Okesina (Nigeria), President-Elect: Dr M Charles Davies (Nigeria), Secretary: H. Lumano (Zambia), Treasurer: Dr J.A.A. Onakoya (Nigeria), Members-at-large: Mr GT Akalu (Ethiopia) and Dr Chabraoui (Morocco).

The aim of the AFCC is to promote and improve the quality of provision of laboratory and health care services to communities it serves. This is ongoing through improving the development and practice of Clinical Chemistry and Laboratory Medicine through education and excellent scientific exchanges in Africa. To date, academic exchanges between Nigeria, Kenya and South Africa have been taking place. Major impact that AFCC has enjoyed in recent times is Young Scientist Program of IFCC, which has been a platform to support many young Africans to attend conferences in various part of the world. Recently we have been having communication with Egypt with a few for further collaboration. Areas of major concern in Clinical Chemistry have been identified and to this end quality management courses have been organised in several member countries. The clinical case study program provided by the AACC has continued to be distributed to all AFCC member countries where it is being incorporated in the training of residents. The AFCC signed a MOU with the African Society of Laboratory Medicine in 2019 to collaborate on promoting training and education of laboratory professionals in the African continent.

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5.7. North American Federation of Clinical Chemistry and Laboratory Medicine (NAFCC)

The North American Federation of Clinical Chemistry and Laboratory Medicine (NAFCC) was formed in December of 2014, representing the American Association for Clinical Chemistry (AACC) and the Canadian Society of Clinical Chemists (CSCC), both member societies of the IFCC. The NAFCC was recognised by the IFCC in February of 2015. The NAFCC was formed in response to changes to the structure of the IFCC Executive Board (EB) to allow each federation to nominate a member to the EB, thus providing for regional representation of all IFCC member societies on the EB. The AACC or CSCC Boards will approve a member to serve as the NAFCC representative to the IFCC EB, alternating between the AACC and CSCC with each new EB election cycle. The representative, as proposed by the AACC, for the period of 2018-2020 is Dr. Ann Gronowski. The primary responsibility of the NAFCC is to facilitate high level communication in relation to the work of IFCC, including:
- Developing and promoting the contribution of laboratory medicine to healthcare
- Strategic planning, policy direction and implementation

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